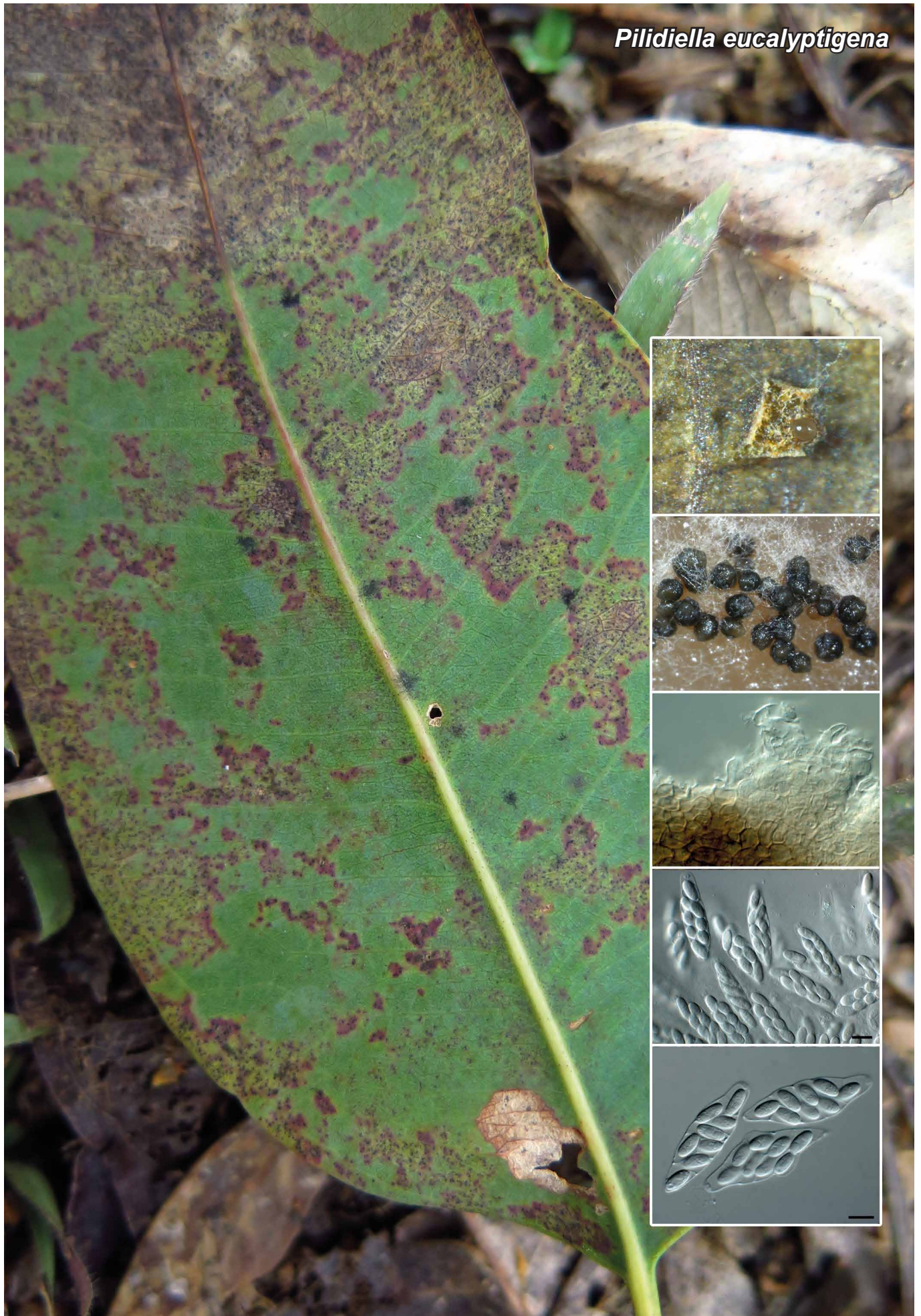


Pilidiella eucalyptigena



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Pilidiella eucalyptigena Crous & M.J. Wingf., *sp. nov.*

Etymology. Name reflects the host genus *Eucalyptus*, from which the species was isolated.

Classification — *Schizoparmeaceae*, *Diaporthales*, *Sordariomycetes*.

Ascomata perithecial, foliicolous, associated with brown leaf spots. On OA initially pale brown and solitary, becoming aggregated in clusters of up to 15, erumpent to superficial, subglobose, up to 250 µm diam, prominently papillate, dark brown; wall up to 50 µm diam, consisting of three regions, namely a conspicuously scaly to warty outer layer, prominent at the apical part of perithecium, 20–30 µm diam, an intermediate layer of medium brown *textura angularis*, and an inner layer of thin-walled, flattened hyaline cells; ostium central, circular, up to 40 µm diam; ostiolar channel lined with septate, hyaline, thin-walled periphysoids. *Asci* clavate, 8-spored, bi-seriate, 40–55 × 10–14 µm, with inconspicuous apical apparatus. *Ascospores* ellipsoidal, hyaline, thin-walled, granular, with terminal mucoid caps or lateral appendages up to 5 µm diam, or ascospore entirely encased in sheath; sheath disappearing with age, and ascospores becoming pale brown and surface appearing roughened (possibly remnants of sheath), (10–)12–13(–14) × (4–)5–6 µm.

Culture characteristics — Colonies spreading, covering dish with moderate aerial mycelium, and lobed, smooth margins. On MEA surface rosy buff, reverse cinnamon. On PDA surface and reverse salmon. On OA surface rosy buff.

Typus. MALAYSIA, Sabah, on leaves of *Eucalyptus brassiana* (*Myrtaceae*), May 2014, M.J. Wingfield (holotype CBS H-22222, culture ex-type CPC 24793 = CBS 139893; ITS sequence GenBank KR476725, LSU sequence GenBank KR476760, MycoBank MB812418); CPC 24794.

Notes — Ascospores of *P. eucalyptigena* are similar in size to those of *P. destruens*, but ascomata are different in that they are aggregated in clusters, and are conspicuously scaly and warty. Furthermore, ascospores have conspicuous sheaths (even in lactic acid), and are much more prominent than in *P. destruens* (mounted in water, Samuels et al. 1993), or in lactophenol or lactic acid (Van Niekerk et al. 2004). It appears, therefore, that *P. destruens* probably resides in a species complex, with *P. eucalyptigena* representing one of these cryptic lineages.

Colour illustrations. *Eucalyptus* leaf with primarily *Teratosphaeria* leaf blotch; ascomata in leaf and in culture; ascomatal wall, asci with ascospores. Scale bars = 10 µm.

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